

THE ASTROPHYSICAL JOURNAL LETTERS

CONTENTS OF VOLUME 520, PART 2

1999 JULY 20, NUMBER 1

	Page
X-RAY OVERLUMINOUS ELLIPTICAL GALAXIES: A NEW CLASS OF MASS CONCENTRATIONS IN THE UNIVERSE? <i>A. Vikhlinin, B. R. McNamara, A. Hornstrup, H. Quintana, W. Forman, C. Jones, and M. Way</i>	L1
MASSIVE COOLING FLOW CLUSTERS INHABIT CROWDED ENVIRONMENTS <i>Chris Loken, Adrian L. Melott, and Christopher J. Miller</i>	L5
WEAK GRAVITATIONAL LENSING AND CLUSTER MASS ESTIMATES <i>Christopher A. Metzler, Martin White, Michael Norman, and Chris Loken</i>	L9
RADIATIVE TRANSFER EFFECTS DURING PHOTOHEATING OF THE INTERGALACTIC MEDIUM <i>Tom Abel and Martin G. Haehnelt</i>	L13
THE CLUSTER L_X - σ RELATION HAS IMPLICATIONS FOR SCALE-FREE COSMOLOGIES <i>Andisheh Mahdavi</i>	L17
THE EFFECTS OF CLUMPING AND SUBSTRUCTURE ON INTRACLUSTER MEDIUM MASS MEASUREMENTS <i>B. Mathiesen, A. E. Evrard, and J. J. Mohr</i>	L21
GAMMA-RAY BURST SPECTRAL FEATURES: INTERPRETATION AS X-RAY EMISSION FROM A PHOTOIONIZED PLASMA <i>C. J. Hailey, F. A. Harrison, and K. Mori</i>	L25
GAMMA-RAY BURST ENVIRONMENTS AND PROGENITORS <i>Roger A. Chevalier and Zhi-Yun Li</i>	L29
AN INTERNAL SECOND-PARAMETER PROBLEM IN THE SCULPTOR DWARF SPHEROIDAL GALAXY <i>S. R. Majewski, M. H. Siegel, Richard J. Patterson, and R. T. Rood</i>	L33
STRONG-FIELD GRAVITY AND X-RAY OBSERVATIONS OF 4U 1820-30 <i>P. Kaaret, S. Piraino, P. F. Bloser, E. C. Ford, J. E. Grindlay, A. Santangelo, A. P. Smale, and W. Zhang</i>	L37
MID-INFRARED IMAGING OF THE YOUNG BINARY STAR HEN 3-600: EVIDENCE FOR A DUST DISK AROUND THE PRIMARY <i>Ray Jayawardhana, Lee Hartmann, Giovanni Fazio, R. Scott Fisher, Charles M. Telesco, and Robert K. Piña</i>	L41
NICMOS OBSERVATIONS OF THE PRE-MAIN-SEQUENCE PLANETARY DEBRIS SYSTEM HD 98800 <i>Frank J. Low, Dean C. Hines, and Glenn Schneider</i>	L45
GIANT OUTBURSTS OF LUMINOUS BLUE VARIABLES AND THE FORMATION OF THE HOMUNCULUS NEBULA AROUND η CARINAE <i>Norbert Langer, Guillermo García-Segura, and Mordecai-Mark Mac Low</i>	L49
THREE VERY YOUNG HgMn STARS IN THE ORION OB1 ASSOCIATION <i>Vincent M. Woolf and David L. Lambert</i>	L55
ASTROMETRY WITH HUBBLE SPACE TELESCOPE FINE GUIDANCE SENSOR 3: THE PARALLAX OF THE CATAclysmic VARIABLE RW TRIANGULUM <i>B. E. McArthur, G. F. Benedict, J. Lee, C.-L. Lu, W. F. van Altena, C. P. Deliyannis, T. Girard, L. W. Fredrick, E. Nelan, R. L. Duncombe, P. D. Hemenway, W. H. Jefferys, P. J. Shelus, O. G. Franz, and L. H. Wasserman</i>	L59
SOLAR RADIUS VARIATIONS AT 48 GHz CORRELATED WITH SOLAR IRRADIANCE <i>J. E. R. Costa, A. V. R. Silva, V. S. Makhmutov, E. Rolli, P. Kaufmann, and A. Magun</i>	L63
NUCLEAR SPIN RELAXATION WITHIN INTERSTELLAR GRAINS <i>A. Lazarian and B. T. Draine</i>	L67
THE JETLIKE NATURE OF He II λ 304 PROMINENCES <i>Y.-M. Wang</i>	L71
INFRARED SPECTROSCOPY OF JET-COOLED CATIONIC POLYAROMATIC HYDROCARBONS: NAPHTHALENE ⁺ <i>Hans Piest, Gert von Helden, and Gerard Meijer</i>	L75
INSTRUCTIONS TO AUTHORS OF LETTERS, AND RECENT LETTERS ABSTRACTS AND OTHER BIBLIOGRAPHICAL SERVICES	Inside Back Cover
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	Back Cover

1999 AUGUST 1, NUMBER 2

POLARIZATION OF THE Ly α HALOS AROUND SOURCES BEFORE COSMOLOGICAL REIONIZATION <i>George B. Rybicki and Abraham Loeb</i>	Page L79
LIKELIHOOD ANALYSIS OF MEGA-PIXEL MAPS <i>A. Kogut</i>	L83
A SPECTACULAR POSTSTARBURST QUASAR <i>M. S. Brotherton, Wil van Breugel, S. A. Stanford, R. J. Smith, B. J. Boyle, Lance Miller, T. Shanks, S. M. Croom, and Alexei V. Filippenko</i>	L87
PKS 1004+13: A HIGH-INCLINATION, HIGHLY ABSORBED RADIO-LOUD QSO—THE FIRST RADIO-LOUD BROAD ABSORPTION LINE QSO AT LOW REDSHIFT? <i>Beverley J. Wills, W. N. Brandt, and A. Laor</i>	L91
A HIGH MERGER FRACTION IN THE RICH CLUSTER MS 1054-03 AT $z = 0.83$: DIRECT EVIDENCE FOR HIERARCHICAL FORMATION OF MASSIVE GALAXIES <i>Pieter G. van Dokkum, Marijn Franx, Daniel Fabricant, Daniel D. Kelson, and Garth D. Illingworth</i>	L95
MORPHOLOGICAL AND PHOTOMETRIC EVOLUTION OF ULTRALUMINOUS INFRARED GALAXIES: THE NATURE OF FAINT SCUBA SOURCES <i>Kenji Bekki, Yasuhiro Shioya, and Ichi Tanaka</i>	L99
A Na I ABSORPTION MAP OF THE SMALL-SCALE STRUCTURE IN THE INTERSTELLAR GAS TOWARD M15 <i>David M. Meyer and J. T. Lauroesch</i>	L103
IS SGR 1900+14 A MAGNETAR? <i>D. Marsden, R. E. Rothschild, and R. E. Lingenfelter</i>	L107
A MOLECULAR COUNTERPART TO THE HH 1-2 FLOW <i>Amaya Moro-Martín, José Cernicharo, Alberto Noriega-Crespo, and Jesús Martín-Pintado</i>	L111
DUST EMISSION FROM HERBIG Ae/Be STARS: EVIDENCE FOR DISKS AND ENVELOPES <i>Anatoly Miroshnichenko, Željko Ivezić, Dejan Vinković, and Moshe Elitzur</i>	L115
WARM DUST IN THE COOL BROWN DWARF GLIESE 229B AND SPECTROSCOPIC DIAGNOSIS OF DUSTY PHOTOSPHERES <i>T. Tsuji, K. Ohnaka, and W. Aoki</i>	L119
THE AGE OF β PICTORIS <i>David Barrado y Navascués, John R. Stauffer, Inseok Song, and J.-P. Caillaud</i>	L123
CHARGE STATES OF SOLAR ENERGETIC IRON: NONEQUILIBRIUM CALCULATION WITH SHOCK-INDUCED ACCELERATION <i>A. F. Barghouty and R. A. Mewaldt</i>	L127
PHYSICAL CONDITIONS IN SHOCKED REGIONS OF ORION FROM GROUND-BASED OBSERVATIONS OF H ₂ O <i>José Cernicharo, Juan R. Pardo, Eduardo González-Alfonso, Eugene Serabyn, Thomas G. Phillips, Dominic J. Benford, and David Mehringer</i>	L131
PLASMA DIAGNOSTICS OF TRANSITION REGION "MOSS" USING SOHO/CDS AND TRACE <i>Lyndsay Fletcher and Bart De Pontieu</i>	L135
SOHO EIT OBSERVATIONS OF EXTREME-ULTRAVIOLET "DIMMING" ASSOCIATED WITH A HALO CORONAL MASS EJECTION <i>Dominic M. Zarro, Alphonse C. Sterling, Barbara J. Thompson, Hugh S. Hudson, and Nariaki Nitta</i>	L139
INSTRUCTIONS TO AUTHORS OF LETTERS, AND RECENT LETTERS ABSTRACTS AND OTHER BIBLIOGRAPHICAL SERVICES	Inside Back Cover
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	Back Cover

